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Fig. 1

MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETAN
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Fig. 2

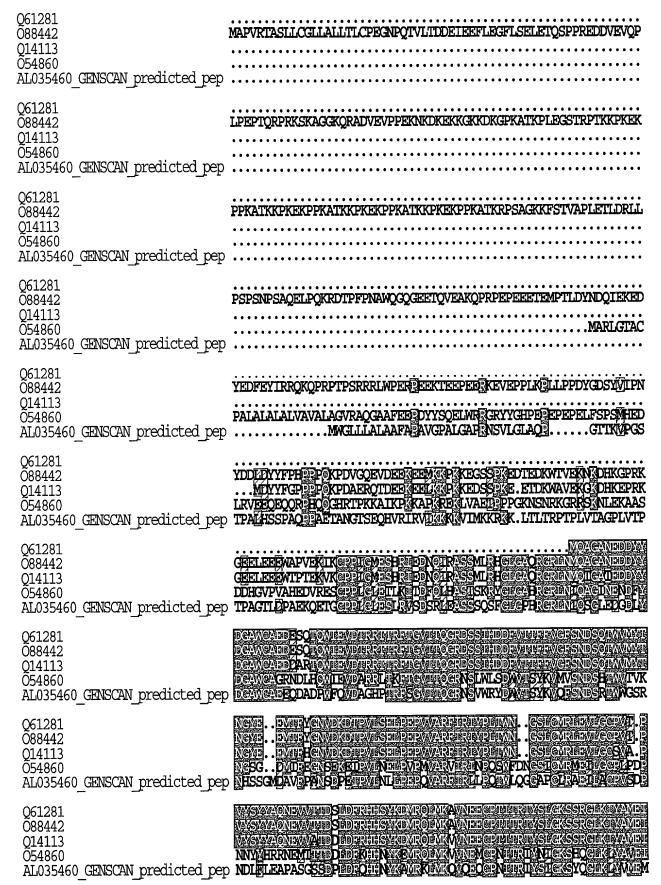


Fig. 3

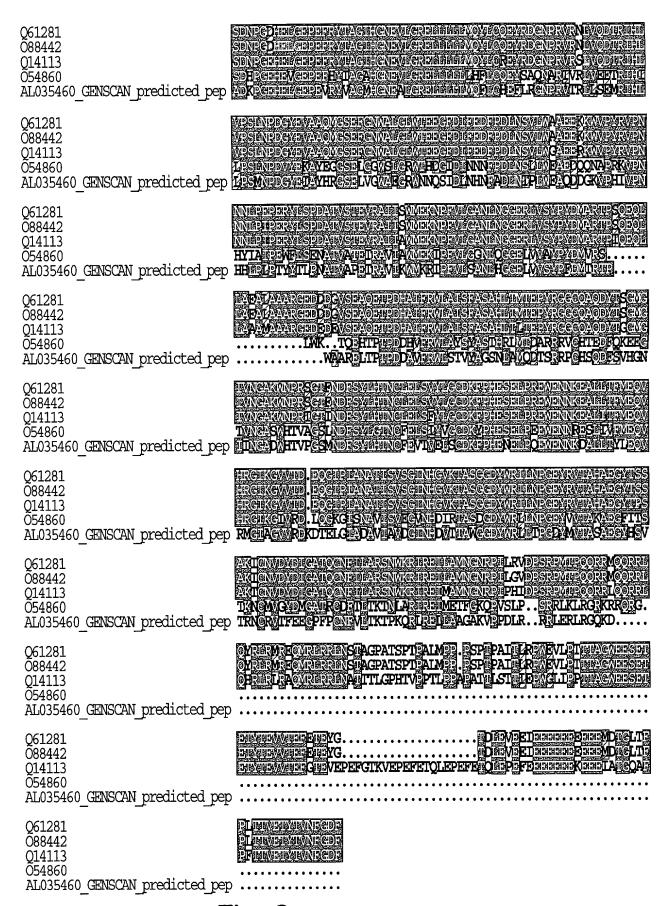


Fig. 3 (Continued)

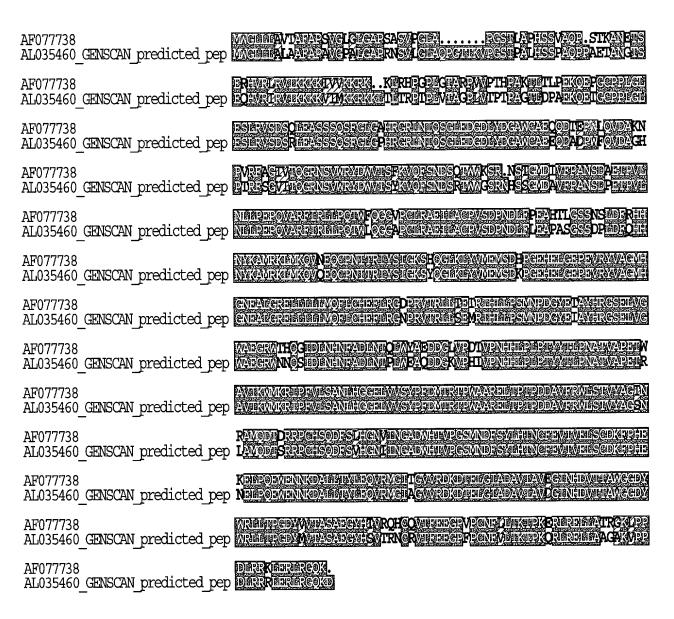


Fig. 4

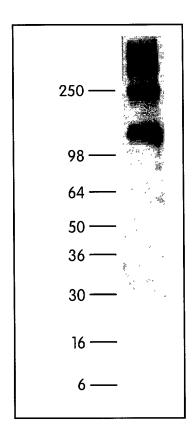
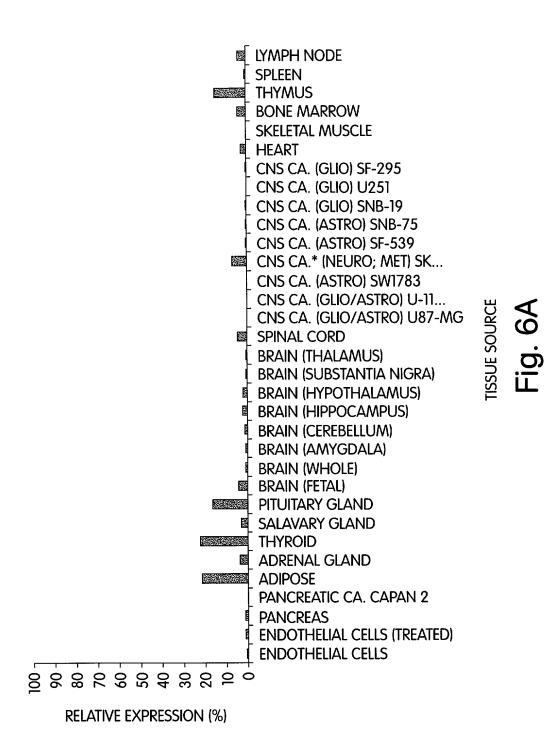
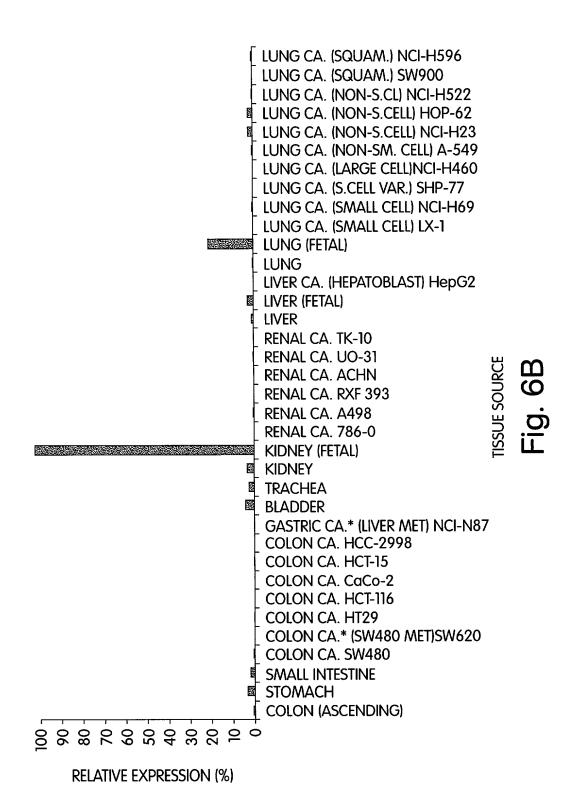
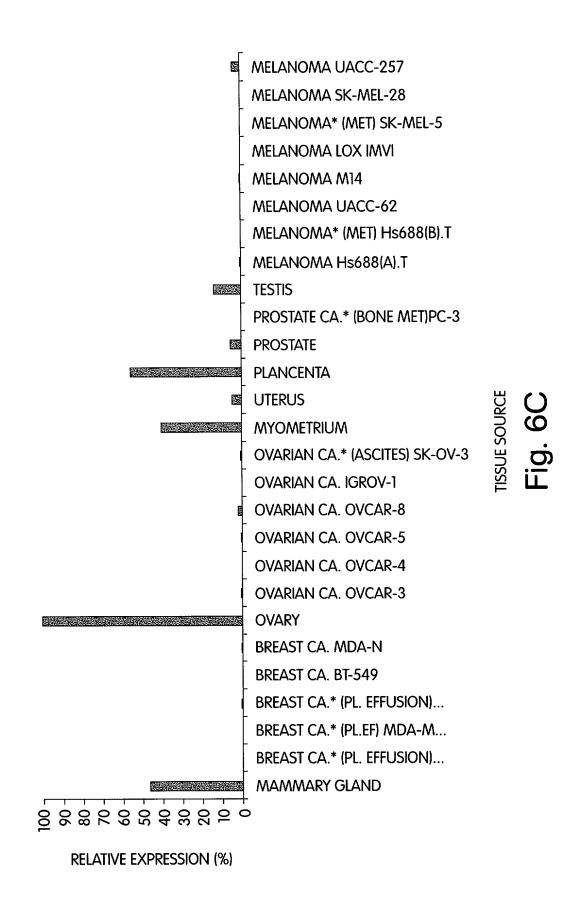
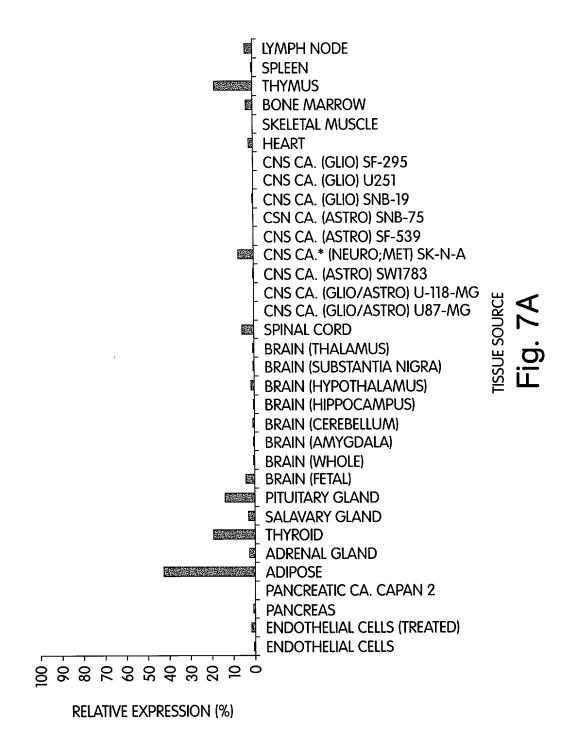


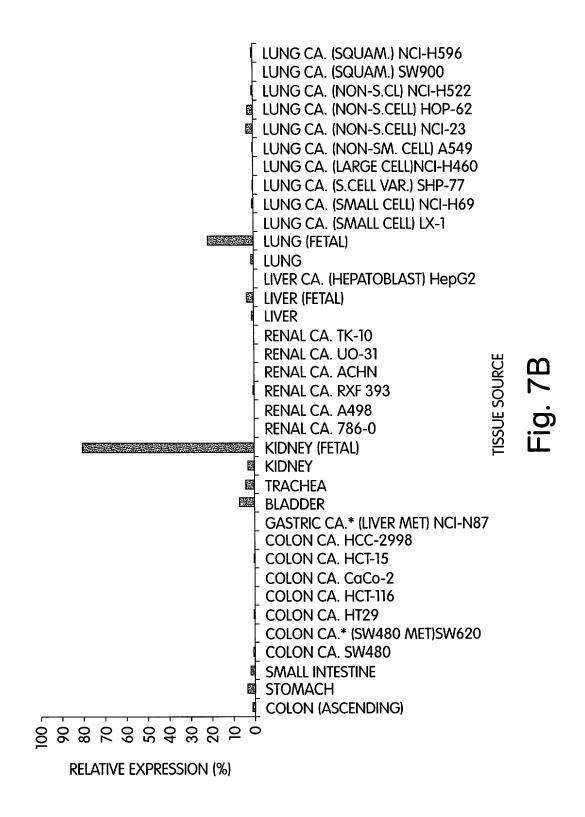
Fig. 5

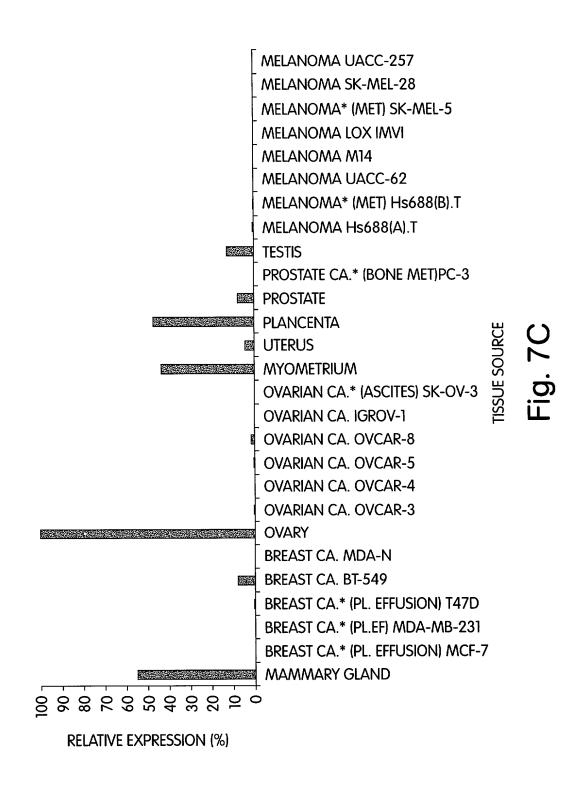












### Figure 8

### >CG54007-01 20190 nt

ATGTGGGGGCTCCTGCCCTGGCCGCCTTCGCGCCGGCCGTCGGCCCGGCTCTGGGG GCGCCCAGGAACTCGGTGCTGGGCCTCGCGCAGCCCGGGACCACCAAGGTCCCAGGCTCG ACCCCGGCCTGCATAGCAGCCCGGCACAGCCGCCGGCGGAGACAGCTAACGGGACCTCA GAACAGCATGTCCGGATTCGAGTCATCAAGAAGAAAAAGGTCATTATGAAGAAGCGGAAG AAGCTAACTCTAACTCGCCCCACCCCACTGGTGACTGCCGGGCCCCTTGTGACCCCCACT CCAGCAGGGACCCTCGACCCCGCTGAGAAACAGAAACAGGCTGTCCTCCTTTGGGTCTG GAGTCCCTGCGAGTTTCAGATAGCCGGCTTGAGGCATCCAGCAGCCAGTCCTTTGGTCTT GGACCACCGAGGACGCTCAACATTCAGTCAGGCCTGGAGGACGGCGATCTATATGAT GGAGCCTGGTGTGCTGAGGAGCAGGACGCCGATCCATGGTTTCAGGTGGACGCTGGGCAC GTCACATCATACAAGGTCCAGTTCAGCAATGACAGTCGGACCTGGTGGGGAAGTAGGAAC CACAGCAGTGGGATGGACGCAGTATTTCCTGCCAATTCAGACCCAGAAACTCCAGTGCTG AACCTCTGCCGGAGCCCCAGGTGGCCCGCTTCATTCGCCTGCTGCCCCAGACCTGGCTC CAGGGAGGCGCCTTGCCTCCGGGCAGAGATCCTGGCCTGCCCAGTCTCAGACCCCAAT GACCTATTCCTTGAGGCCCCTGCGTCGGGATCCTCTGACCCTCTAGACTTTCAGCATCAC AATTACAAGGCCATGAGGAAGCTGATGAAGCAGGTACAAGAGCAATGCCCCAACATCACC CGCATCTACAGCATTGGGAAGAGCTACCAGGGCCTGAAGCTGTATGTGATGGAAATGTCG 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GTGACACGTCCCAGATACTTGGGAGGCTGAGGTGGGAGGATCGCTTGAACCCAGGAGTTC CAGACTGCAGTGAGCTGTGATTACACTATTGCACTCCAGCCTAGGCTGTGGGAAAGAGAG TTTCTGGGGTGCCAGCTGAGTTAGTCTTCCCTGTGTGAGACACCCATGGGAAGCCATGCG CGGCCTCTGAGGAGAAAAGTCTCCTTATTGCCTTCATGTCTTTACGCCCGAGAGCAGAAC CCCTCAGCGGCATTCCACAGGTTGCTCAGGCATATAACACTCCCTTGAAGCAGTGGAGTA TAATCAAACATCTTGGCTCCTGAAACCCACTCCCACCCGTTTCAGTCCCGATAAGTT AAAGATTTGTTTTGTTTTGTTTTGAGACGGAGTCTCGCTCTGTCGCCCAGGCTGG AGTGCGGTGGCTCGATCTCGGCTCACTGCAAGCTCCGCCTCCCGGGTTCACGCCATTCTC TTTGTATTTTTAGTAGAGACGGGGTTTCACCACGTTGGCCAGAGTGGTCTCGAACTCCTG ACCTCAAGCGATCCACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCAC CGCGCCCGGCCAGTTAAAGATCTTAAGTAGTTTGACACTCCTCTTTGCTCAAGGAAATTC ACAGAAACCGCCACTGCTATACATCTTACAGAATGACTCTCCAGTTCTCCTTCACTGATT AATCCTTTCCCTCATCCTCCTCCTCCATCTGCCCTAAGAACAAGAGCTTGTAA ACCAATAAATTGGGCGGAGCCTGAGAACTCTGGGCCGTGAGCAAGCCTCCGACGCTCCGG  ${\tt TCCCCTGGACCCGCCTTTTAAACGCTTATTCTGTCTCTTTCTAACTCCTTTGTCTCCGCC}$ GGACTCGGGGTAACCGCTAGGCGTTATGGGGCTGTTTTCCCCAACATAGGCAACAGAGCA 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CGGAAGCTTGGTACCAGATGTGGCTTTAGACAATAGGGAAGTGTCATTCTGAATTGCTCA GATAAGGGGCTTTGCCTCCTGTTGGTCGACTTGATGGCCACCAGGTGATCTCTGGTCTCT TCAGTGTGGCTTTGCAGACTATAAAGGCGCAGCGCCCAACGAGGCGGGTTGGCCCCAGA CGGCGGAGAGGGCAGAGTCGGCGGTCCTGAGACTTGGGGCCGCCCCTTGGAGGTCA GCCCGCTCGCTCCCGGCCCTCTCCTCCTCCCGAGGTCCGAGGCGGCAGCGGCCT CTCGGCAGGAAGAGACCGACCGCCACCGCCGTAGCCCGCGCGCCCCTGGCACTCAATC CCCGCCATGTGGGGGCTCCTGCTCGCCCTGGCCGCCTTCGCGCCGGCCGTCGGCCCGGCT CTGGGGGCCCCAGGAACTCGGTGCTGGGCCTCGCGCAGCCCGGGACCACCAAGGTCCCA GGCTCGACCCCGGCCTGCATAGCAGCCCGGCACAGCCGCCGGCGGAGACAGCTAACGGT GAGTTCCCCGACCGACGGTCCGCTCCCCCGCAAGCCGACTGCCCGGCTCTCCTGCCCCGT GGGGCGATCCCTCCCTAACACGCGGGCACACGCACACCCACGCACACTCACAGTCATGCA GCACACACATATACACTCCACACTCCCTCAACTCCCTGCTGGGAGCAATGGCTGCTG ACTCGGCAGCCCCAGTTCCCTGCCAGACCTAGTCAGCAGTCCCAGGACAGGCGCCAGTGG GATGCTGCCTCTTCCAAGCCCCAAACCTTCCCTTTTCACCAAAGACAAAACAGGCCAGAA CTGGCAGGAGGGGAGACAGAGGCAGAAGCTCTCAAGGTGCAGAGCAAGACTGCGTAGG AGAGAGTTTGAAGGCGAGGGCTGGAGAGAAAGAACAAAAGGAAAGAAGGGAGAGCCCCTC GCTGAGGCTGCCGGGAGGATGGGGCAGAGCGGGAGAGGAAGGCAGCCCGACCTCCCAGCT TTCCAGATGTGGAATAGGAGAGGAGGAGCGCAAGCGGAGGGCACTCAGGGGCTTCTAGAG GAGGCAAGTGGAGGGGTCTTGAAGGGTGATGTCCCCGAGTCAGGGGAGTCTGGAGAGA GAGAGAGAGAGGGCTGCCAAGAAGGAAGCGGCGGCAAAGGCACAGGGGCACCAGATG CGGAAATGGGCAGCCTGTTCTGGAGGCAGCTGTGGAGCTTCGATGGGTACCCCCAGCACC TGCCTGGGCAGAGCCTTGTGCTGAAGGGCCGGCGGGCAGGCCCAGCCCTGAAAGCCTCGA CACCCAGGCAGACATGGATTCCAGGACAGGCCATCTGAGCCCAGAGAGCAGACACAACAA TGGAAGCGGCACAGGGGTTTTGGGGCATGATGCTGAGTCTGGAGCTAAGAAAGCCTCCTT GGAAAGGCATCTGGGCTGAGATGCAAAGGAAGAATGGGAATTAGGTGAAAAAATCAGAGG CGAGGGGTAGCATTACAGGGGAGGGGATAGCTAGTGCAGAGGCCCGGAGGTAAAGTGCCA GACTCAGCTCTTTGGAGCAACCGAACAGTTTCTAGAGGCTGGGTGCAGCTCTCCATTGGA TTAGAGGTTCACAGGGGAGGCTGGCCAAGCATGTAGTTACATCAGGGAGGAGAAGGAGGA GCCAAGGAAGTGACTGGAGAGGCAGGTTGGGGTCAGATTGCAGGCCTTTGATGTCCTGTG AAGGCTGTTAGATCCTGGTGTGTGGCCTGCTGTGGGCTCACATGTCTTCTTGGGCTGGC AGACCTTTCCATCCGGGGTTTCACCATTCTTCCTTTCCCCCATGCTGTGCCTCTCGGACC CCAAGGGACCTCAGAACAGCATGTCCGGATTCGAGTCATCAAGAAGAAAAAGGTCATTAT GAAGAAGCGGAAGAAGCTAACTCTAACTCGCCCCACCCCACTGGTGACTGCCGGGCCCCT TGTGACCCCCACTCCAGCAGGGACCCTCGACCCCGCTGAGAAACAAGAAACAGGTACTTC CTCTCCAGGGGCCCAGCCCAGACTTGCAGCCCCTGGGGCACTTTACCAGCACAGCTCTTG GCCTCATGGGCACCGGCACGCCCCTTGCTTGCCTAGCGCAGGAGCAACCTTAGGCTCAGC TTCCCACCTGCCTGGCTACCCTCCCTCTGGTCCTGTCTCACTGTTCTATCCCCGCCCCA GGCTGTCCTCTTTGGGTCTGGAGTCCCTGCGAGTTTCAGATAGCCGGCTTGAGGCATCC AGCAGCCAGTCCTTTGGTCTTGGACCACCCGAGGACGGCTCAACATTCAGGTCAGTAAT  ${\tt CCTGGCTCGGAGCCATGGTCTCAGGGTAGGGAAGGCAGCCCCTGGGAGCTTCTCTCCTGC}$ CTCCTCTCTGTCCTGGCCTGCCCCACTCTGTCCAACTGGGCCTGACCACCATGTCCTGTG TCTGCAGTCAGGCCTGGAGGACGGCGATCTATATGATGGAGCCTGGTGTGCTGAGGAGCA GGACGCCGATCCATGGTTTCAGGTGGACGCTGGGCACCCCACCCGCTTCTCGGGTGTTAT CACACAGGCAGGAACTCTGTCTGGAGGTGAGGCAGACTAACCCTAGGTCAGGAGGTCAC GTATGACTGGGTCACATCATACAAGGTCCAGTTCAGCAATGACAGTCGGACCTGGTGGGG AAGTAGGAACCACAGCAGTGGGATGACGCAGTGAGTGGTCCCACTGTGGCTGGGCCTC CATGCTGGGAGTTGGGCACCCAGTCCAGGCTAGGCTGAGGCTCCTCTGAGGACAAGGAAT AGACGCCAGCTTAGGCTTCCCAGGGGGGTGTGGCTTGTTGTCAAGAGGGTGGCACACGGC AGGCACCATTGGGAGCCAGCTGCTTTGGGACATGCCCACATCCTCCCCAGATAATGCCAC CACAGGGTGGGTGCTTCACGGTACAGCTTCCTCCTGGCGTGCCCCTTCTGGCCCGGG GCCTCTGGTCCACATCACTTCTTGCCTTCTCGTGGTTCTGACTTCCGCATCTCATGGACC TCTTTTTACAGCAGGCTACAATGTGGAGTCCTGGCCAGCTCTAGGATTGGCTTCCCCCGA GTCATGTGGCCAAACTGGTCTAATGAACTGTGTCCAATCCAGAGAGCAAGGCTGCCTAGG GCTGCCCATTGGCAGGGCTGTGGGCCGGGGTCTGTGTTTGATGCACAGTGCAAGTCTCT AGCTGAGCCCACTAGGGTGGGGAGACAGTAAGCTTGGAGGCCTGAGCTCCTTCCCTGGGT CCTGGGCCAGGCTTCTGGGGTTTGAGCAGCCACAACAGAGAACTTGCTGCCCCCAGGTAT TTCCTGCCAATTCAGACCCAGAAACTCCAGTGCTGAACCTCCTGCCGGAGCCCCAGGTGG CCCGCTTCATTCGCCTGCTGCCCCAGACCTGGCTCCAGGGAGGCGCGCCTTGCCTCCGGG CTTGGATGCAGGGTGCATCCTTCACTGTGGACACCCCTTTACCATAAACTCAACCTCCA CCAGACCCCAATGACCTATTCCTTGAGGCCCCTGCGTCGGGATCCTCTGACCCTCTAGAC TTTCAGCATCACAATTACAAGGCCATGAGGAAGGTCAGATATAACCCCTATGACCTGGGA AGGAGGGCCCACCCATCTCAGGTCCCCTTCCCACCTTCCCACCGGGGCACAACCTGCTGT TAAGCTCCATCCCACTTTCCCTTATTATGGCGCCCCCCAGTCCTACCCCTTCCTCCCGG CTCTGCTGCCGCTCCCTGTACCATGATGGGATGCCCCCTCTGTGTGGGCCATCGCT GACTTTTTAAGTCTTTCCATGGCACATGTGATCTGCCCCTGGGTGTACCCCTCCCATGCC TCATGCCACGCTACACTCTGCCCACCAGCTGATGAAGCAGGTACAAGAGCAATGCCCCAA CATCACCCGCATCTACAGCATTGGGAAGAGCTACCAGGGCCTGAAGCTGTATGTGATGGA AATGTCGGACAAGCCTGGGGAGCATGAGCTGGGTACTGGCATGGGGAGTGGGGAGAGGTA GGCACAGGCCAGGCCCCAGGCATGAACCCGCTGCAAGCCCCCATGTGTCCCCCAGGGGAG CCTGAGGTGCGCTACGTGGCATGCATGGGAACGAGGCCCTGGGGCGGGAGTTGCTT CTGCTCCTGATGCAGTTCCTGTGCCATGAGTTCCTGCGAGGGAACCCACGGGTGACCCGG CTGCTCTCTGAGATGCGCATTCACCTGCTGCCCTCCATGAACCCTGATGGCTATGAGATC GCCTACCACCGGGTAGGCCACCCAGCATGAGGGCCACTCTGTCCTTCTGCCCTGGTGGCT GGACCTGCTCGACTTGAACAAGCCTCTTGCCCGGCAGGGTTCAGAGCTGGTGGGCTGGGC CGAGGGCCGCTGGAACAACCAGAGCATCGATCTTAACCATAATTTTGCTGACCTCAACAC ACCACTGTGGGAAGCACAGGACGATGGGAAGGTGCCCCACATCGTCCCCAACCATCACCT GCCATTGCCCACTTACTACACCCTGCCCAATGCCACCGTGAGTATTTTGAGGGCGGCAGT GGAGGTCTGTGGGGGGCGGACCTTGTCTCTGTCTCTGCCCCTCCTGACCTGCCCCATCC AGGTGGCTCCTGAAACGCGGGCAGTAATCAAGTGGATGAAGCGGATCCCCTTTGTGCTAA GTGCCAACCTCCACGGGGTGAGCTCGTGGTGTCCTACCCATTCGACATGACTCGCACCC CGTGGGCTGCCCGCGAGCTCACGCCCACACCAGATGATGCTGTGTTTCGCTGGCTCAGCA CTGTCTATGCTGGCAGTAATCTGGCCATGCAGGACACCAGCCGCCGACCCTGCCACAGCC AGGACTTCTCCGTGCACGGCAACATCATCAACGGGGCTGACTGGCACACGGTCCCCGGGA GTATGTGCCTGAGGGTGGAGTTAGCCCTGGCCCCGTAACCCCCGCCCTGATAAGACAGCC TGCGGTTGCGTACAGTGCTGGCGTCTGTTCCCACTCTGAAGTGTCCCTCAGAGAAGGGAG GGTAGCGGGAGGATGGGACCGCATCCCGCCTGCTTAGGCAGCAGTGTCTGTGGTCCCCTT AGGCATGAATGACTTCAGCTACCTACACCCAACTGCTTTGAGGTCACTGTGGAGCTGTC CTGTGACAAGTTCCCTCACGAGAATGAATTGCCCCAGGAGTGGGAGAACAACAAAGACGC CTCCTGCTGTCCATTTAGGCTACAGCTCCTACCAGGGGTTCTTCTAAGGTCCAGCTGAGC ATTCAGACTCACAAGATGCCATGGGCCATGCTTGGTATCAGATTGTCTTGGAAGCACACA GGACAGGAAGTGCAGTTTGCTGGCAGCGTGGCATCGTGTTAGAGCCGGTGGGAGGAGCCT CCATTGCAGTCTAGGTGGTGGTCCGTGGCGCTGCCCCAGAGCTATCCTCAGGAGAGACTC ACGTGAGGCAGGTGCAGGAGCTGTCCTGGCATAGAAGCTTCATGTTCCATGGAGCTCATA ACCCTTGTAATAGCTCCATAAGCAGAGCTTCCAAAGGGTCTACCAAAGACAAGCCCAATA ACCTGGGAAAGCCCAAGGATAGATAAGCCTTCCTACCAGGTATTTATCATTTTCTTAGTC  AGGAACACAGTAGACCTACCACTTTGCTCAGGTTTGCAGGGCAACAGAGCCAGCAAGTTA GCTAAACAGCACATTATCCTGCCGAAGGGGAAGGGCTCTGATAACCTCTTCCCACACAGG TGCGCATGGGCATTGCAGGAGTGGTGAGGGACAAGGACACGGAGCTTGGGATTGCTGACG CTGTCATTGCCGTGGATGGGATTAACCATGACGTGACCACGGGTGTGTTTGACCGGGAGG GCAAGGGAAGGGCTGGAGGCTCGGGAAGAAGAAGAAGATCATTAATTGGGT CCTGATCGTGCCCTTCACTCTCCTCAGCGTGGGGGGGGATTATTGGCGTCTGACCC CAGGGGACTACATGGTGACTGCCAGTGCCGAGGGCTACCATTCAGTGACACGGAACTGTC GGGTCACCTTTGAAGAGGGCCCCTTCCCCTGCAATTTCGTGCTCACCAAGACTCCCAAAC AGAGGCTGCGCGAGCTGCCAGCTGGGGCCCAAGGTGCCCCCGGACCTTCGCAGGCGCC TGGAGCGGCTAAGGGGACAGAAGGATTGATACCTGCGGTTTAAGAGCCCCTAGGGCAGGCT  $\tt CTCATTAAAGCTACCGGGCACCTTAGCTCATCTTCGTGTTCTCTGTGCCCCAGGTCCT$  $\tt CCCCCGGGGGGCCTCGGCCCAGCCCTCAGTTCCTATTCTGCACACTTGCACACTCT$ CATCAGTTGGCTTCTGGACACATTGTGTGAAAAGAGGATCCCACCTGGGCTCTTCTTGAA CCAAGGGCCTGGCAGAGCAACTCATTTCTTCTGATCAGCTTCTGCTACAGGTACCATTAC ACTGCTGCCAGGCATTCTGTAAGCGCCTGCTCATTGCCAGGTGTGCAAGGAATCAGGATC AGCCGTGCCTCACACTCCTGGGGCTCCTAGTCAAGGGAAAGGACAGTTCGGTACA TTGTGAGACATGCTAGGGTGGAGGCCAGGTGCCGTGAGAGTGCAGGGGAGCTGCACACGT GAAATACAGCACTGCACATCAACAGGACTGGGGCAGTCAAGGATGCAATAGAAGTAGTGG CTCTAGAAGTTCAGGCGGGAGGTGGGCAGGGTGTGGAGTATGGACAGGGATGGCTCCAAG GAGGAGGGTCAGCCAAAGGTGGGTCAGCTGAGAACATTTGAATTTGCTTCAGCCATTCTC AGAGTATTGATAACTGATAGGCTTTGCTGAGTTTCTATCAGACTGAAGGGGAAGTTGTGT ATCAGTCTGTGTCTTGCCAGGTAAACAACCCATTCTAGGCACTTAAAGTGGAGGGAAATT TAATGCTGGAAATTGGATAGGAAGGTGTTGGAAGAGCTGGATGAGGCCGGGTGTGGTGGC TCACACCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGAGGATTGCTTGAGCCCAGGA GTTTGAGACCAGCCTGGATAACATAGCCAAACCCCGCCTCTACAAAAATAAGAAATAAGA AACATAGCCAGCTGTAGTGGCGCATGGCTAAGGGAGGCAGAGGCAGGAGGATCACTGGAG CCTGGGAGGTGGAGGCTGCAGAGGCAGCAGTGACCATGATGGCGCCACTATACTCCAAC CTGGATGGTCATAACAAAATAAACAAAAAA (SEQ ID NO:3)

#### >CG54007-04 **ATGTGGGGGCTCCTGCTCGCCCTGGCCGCCTTCGCGCCGGCCGGCCCGGCTCTGGGG** 60 GCGCCCAGGAACTCGGTGCTGGGCCTCGCGCAGCCCGGGACCACCAAGGTCCCAGGCTCG 120 ACCCCGGCCCTGCATAGCAGCCCGGCACAGCCGCCGGCGGAGACAGCTAACGGGACCTCA 180 GAACAGCATGTCCGGATTCGAGTCATCAAGAAGAAAAAGGTCATTATGAAGAAGCGGAAG 240 AAGCTAACTCTAACTCGCCCCACCCCACTGGTGACTGCCGGGCCCCTTGTGACCCCCACT 300 CCAGCAGGGACCCTCGACCCCGCTGAGAAACAAGAAACAGGCTGTCCTCCTTTGGGTCTG 360 GAGTCCCTGCGAGTTTCAGATAGCCGGCTTGAGGCATCCAGCAGCCAGTCCTTTGGTCTT 420 GGACCACACCGAGGACGGCTCAACATTCAGTCAGGCCTGGAGGACGGCGATCTATATGAT 480 GGAGCCTGGTGTGCTGAGGAGCAGGACGCCGATCCATGGTTTCAGGTGGACGCTGGGCAC 540 600 660 GTCACATCATACAAGGTCCAGTTCAGCAATGACAGTCGGACCTGGTGGGGAAGTAGGAAC CACAGCAGTGGGATGGACGCAGTATTTCCTGCCAATTCAGACCCAGAAACTCCAGTGCTG 720 780 AACCTCCTGCCGGAGCCCCAGGTGGCCCGCTTCATTCGCCTGCTGCCCCAGACCTGGCTC 840 CAGGGAGGCGCCCTTGCCTCCGGGCAGAGATCCTGGCCTGCCCAGTCTCAGACCCCAAT GACCTATTCCTTGAGGCCCCTGCGTCGGGATCCTCTGACCCTCTAGACTTTCAGCATCAC 900 960 AATTACAAGGCCATGAGGAAGCTGATGAAGCAGGTACAAGAGCAATGCCCCAACATCACC 1020 CGCATCTACAGCATTGGGAAGAGCTACCAGGGCCTGAAGCTGTATGTGATGGAAATGTCG 1080 GGGAACGAGGCCCTGGGGCGGGAGTTGCTTCTGCTCCTGATGCAGTTCCTGTGCCATGAG 1140 TTCCTGCGAGGGAACCCACGGGTGACCCGGCTGCTCTCTGAGATGCGCATTCACCTGCTG 1200 CCCTCCATGAACCCTGATGGCTATGAGATCGCCTACCACCGGGGTTCAGAGCTGGTGGGC 1260 TGGGCCGAGGGCCGCTGGAACAACCAGAGCATCGATCTTAACCATAATTTTGCTGACCTC 1320 AACACACCACTGTGGGAAGCACAGGACGATGGGAAGGTGCCCCACATCGTCCCCAACCAT 1380 CACCTGCCATTGCCCACTTACTACACCCTGCCCAATGCCACCGTGGCTCCTGAAACGCGG 1440 1500 GCAGTAATCAAGTGGATGAAGCGGATCCCCTTTGTGCTAAGTGCCAACCTCCACGGGGGT GAGCTCGTGGTGTCCTACCCATTCGACATGGTGACTGCCAGTGCCGAGGGCTACCATTCA 1560 $\tt GTGACACGGAACTGTCGGGTCACCTTTGAAGAGGGCCCCTTCCCCTGCAATTTCGTGCTC$ 1620 ACCAAGACTCCCAAACAGAGGCTGCGCGAGCTGCTGGCAGCTGGGGCCAAGGTGCCCCCG 1680 ${\tt GACCTTCGCAGGCGCCTGGAGCGGCTAAGGGACAGAAGGAT{\tt TGA}}$ (SEO ID NO:5)1725

FIG. 10

>CG54007-04 MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS 60 120 EOHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL 180 ESLRVSDSRLEASSSOSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH 240 PTRFSGVITOGRNSVWRYDWVTSYKVOFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL 300 NLLPEPOVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH 360 NYKAMRKLMKOVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH 420 GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG WAEGRWNNOSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR 480 AVIKWMKRIPFVLSANLHGGELVVSYPFDMVTASAEGYHSVTRNCRVTFEEGPFPCNFVL 540 (SEO ID NO:6)574 TKTPKQRLRELLAAGAKVPPDLRRRLERLRGQKD

A

### FIG. 11

>CG54007-05 **ATG**TGGGGGCTCCTGCTCGCCCTGGCCGCCTTCGCGCCCGGCCGTCGGCCCGGCTCTGGGG 60 GCGCCCAGGAACTCGGTGCTGGGCCTCGCGCAGCCCGGGACCACCAAGGTCCCAGGCTCG 120 ACCCCGGCCCTGCATAGCAGCCCGGCACAGCCGCCGGCGGAGACAGCTAACGGGACCTCA 180 240 GAACAGCATGTCCGGATTCGAGTCATCAAGAAGAAAAAGGTCATTATGAAGAAGCGGAAG AAGCTAACTCTAACTCGCCCCACCCCACTGGTGACTGCCGGGCCCCTTGTGACCCCCACT 300 360 CCAGCAGGGACCCTCGACCCCGCTGAGAAACAAGAAACAGGCTGTCCTCTTTGGGTCTG 420 GAGTCCCTGCGAGTTTCAGATAGCCGGCTTGAGGCATCCAGCAGCCAGTCCTTTGGTCTT GGACCACACCGAGGACGGCTCAACATTCAGTCAGGCCTGGAGGACGGCGATCTATATGAT 480 GGAGCCTGGTGTGCTGAGGAGCAGGACGCCGATCCATGGTTTCAGGTGGACGCTGGGCAC 540  $\tt CCCACCCGCTTCTCGGGTGTTATCACACAGGGCAGAGATCCTGGCCTGCCCAGTCTCAGA$ 600  $\tt CCCCAA{\bf TGA}CCTATTCCTTGAGGCCCCTGCGTCGGGATCCTCTGACCCTCTAGACTTTCA$ 660 720 GCATCACAATTACAAGGCCATGAGGAAGCTGATGAAGCAGGTACAAGAGCAATGCCCCAA CATCACCCGCATCTACAGCATTGGGAAGAGCTACCAGGGCCTGAAGCTGTATGTGATGGA 780 AATGTCGGACAAGCCTGGGGAGCATGAGCTGGGGGAGCCTGAGGTGCGCTACGTGGCTGG 840 CATGCATGGGAACGAGGCCCTGGGGCGGGAGTTGCTTCTGCTCCTGATGCAGTTCCTGTG 900 960 CCATGAGTTCCTGCGAGGGAACCCACGGGTGACCCGGCTGCTCTCTGAGATGCGCATTCA CCTGCTGCCCTCCATGAACCCTGATGGCTATGAGATCGCCTACCACCGGGGTTCAGAGCT 1020 GGTGGGCTGGGCCGAGGGCCGCTGGAACAACCAGAGCATCGATCTTAACCATAATTTTGC 1080 TGACCTCAACACCACTGTGGGAAGCACAGGACGATGGGAAGGTGCCCCACATCGTCCC 1140 1200 CAACCATCACCTGCCATTGCCCACTTACTACACCCTGCCCAATGCCACCGTGGCTCCTGA AACGCGGGCAGTAATCAAGTGGATGAAGCGGATCCCCTTTGTGCTAAGTGCCAACCTCCA 1260 1320 CGGGGGTGACCTCGTGGTGTCCTACCCATTCGACATGACTCGCACCCCGTGGGCTGCCCG CGAGCTCACGCCCACACCAGATGATGCTGTGTTTCGCTGGCTCAGCACTGTCTATGCTGG 1380 1440 CAGTAATCTGGCCATGCAGGACACCAGCCGCCGACCCTGCCACAGCCAGGACTTCTCCGT 1500 1560 CAGCTACCTACACACCAACTGCTTTGAGGTCACTGTGGAGCTGTCCTGTGACAAGTTCCC 1620 GGAGCAGGTGCGCATGGGCATTGCAGGAGTGGTGAGGGACAAGGACACGGAGCTTGGGAT 1680 TGCTGACGCTGTCATTGCCGTGGATGGGATTAACCATGACGTGACCACGGCGTGGGGCGG 1740 GGATTATTGGCGTCTGCTGACCCCAGGGGACTACATGGTGACTGCCAGTGCCGAGGGCTA 1800 CCATTCAGTGACACGGAACTGTCGGGTCACCTTTGAAGAGGGCCCCTTCCCCTGCAATTT 1860 1920 CGTGCTCACCAAGACTCCCAAACAGAGGCTGCGCGAGCTGCTGGCAGCTGGGGCCAAGGT GCCCCGGACCTTCGCAGGCGCCTGGAGCGCTAAGGGGACAGAAGGATTGA (SEQ ID NO:7)1972

FIG. 12

>CG54007-05	
MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS	6
EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL	12
ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH	18
PTRFSGVITOGRDPGLPSLRPO (SEO ID NO:8)202	

>CG54007-06 60 ATGTGGGGGCTCCTGCTCGCCCTGGCCGCCTTCGCGCCCGGCCGTCGGCCCGGCTCTGGGG GCGCCCAGGAACTCGGTGCTGGGCCTCGCGCAGCCCGGGACCACCAAGGTCCCAGGCTCG 120 ACCCCGGCCCTGCATAGCAGCCCGGCACAGCCGCCGGCGGAGACAGCTAACGGGACCTCA 180 GAACAGCATGTCCGGATTCGTGTCATCAAGAAGAAAAAGGTCATTATGAAGAAGCGGAAG 240 AAGCTAACTCTAACTCGCCCCACCCCACTGGTGACTGCCGGGCCCCTTGTGACCCCCACT 300 CCAGCAGGGACCCTCGACCCCGCTGAGAAACAAGAAACAGGCTGTCCTCCTTTGGGTCTG 360 GAGTCCCTGCGAGTTTCAGATAGCCGGCTTGAGGCATCCAGCAGCCAGTCCTTTGGTCTT 420 GGACCACACCGAGGACGGCTCAACATTCAGTCAGGCCTGGAGGACGGCGATCTATATGAT 480 GGAGCCTGGTGTGCTGAGGAGCAGGACGCCGATCCATGGTTTCAGGTGGACGCTGGGCAC 540 600 GTCACATCATACAAGGTCCAGTTCAGCAATGACAGTCGGACCTGGTGGGGAAGTAGGAAC 660 CACAGCAGTGGGATGGACGCAGTATTTCCTGCCAATTCAGACCCAGAAACTCCAGTGCTG 720 AACCTCCTGCCGGAGCCCCAGGTGGCCCGCTTCATTCGCCTGCTGCCCCAGACCTGGCTC 780 CAGGGAGGCGCCTTGCCTCCGGGCAGAGATCCTGGCCTGCCCAGTCTCAGACCCCAAT 840 GACCTATTCCTTGAGGCCCCTGCGTCGGGATCCTCTGACCCTCTAGACTTTCAGCATCAC 900 AATTACAAGGCCATGAGGAAGCTGATGAAGCAGGTACAAGAGCAATGCCCCAACATCACC 960 CGCATCTACAGCATTGGGAAGAGCTACCAGGGCCTGAAGCTGTATGTGATGGAAATGTCG 1020 1080 GGGAACGAGGCCCTGGGGCGGGAGTTGCTTCTGCTCCTGATGCAGTTCCTGTGCCATGAG 1140 TTCCTGCGAGGGAACCCACGGGTGACCCGGCTGCTCTCTGAGATGCGCATTCACCTGCTG 1200 CCCTCCATGAACCCTGATGGCTATGAGATCGCCTACCACCGGGGTTCAGAGCTGGTGGGC 1260 TGGGCCGAGGGCCGCTGGAACAACCAGAGCATCGATCTTAACCATAATTTTGCTGACCTC 1320 AACACACCACTGTGGGAAGCACAGGACGATGGGAAGGTGCCCCACATCGTCCCCAACCAT 1380 CACCTGCCATTGCCCACTTACTACACCCTGCCCAATGCCACCGTGGCTCCTGAAACGCGG 1440 GCAGTAATCAAGTGGATGAAGCGGATCCCCTTTGTGCTAAGTGCCAACCTCCACGGGGGT 1500 GAGCTCGTGGTGTCCTACCCATTCGACATGACTCGCACCCCGTGGGCTGCCCGCGAGCTC 1560 ACGCCCACACCAGATGATGCTGTGTTTCGCTGGCTCAGCACTGTCTATGCTGGCAGTAAT 1620  $\tt CTGGCCATGCAGGACACCAGCCGACCCTGCCACAGCCAGGACTTCTCCGTGCACGGC$ 1680 1740  $\tt CTACACCAACTGCTTTGAGGTCACTGTGGAGCTGTCCTGTGACAAGTTCCCTCACGAG$ 1800 1860 GTGCGCATGGGCATTGCAGGAGTGGTGAGGGACAAGGACACGGAGCTTGGGATTGCTGAC 1920 GCTGTCATTGCCGTGGATGGGATTAACCATGACGTGACCACGGCGTGGGGCGGGGATTAT 1980 TGGCGTCTGCTGACCCCAGGGGACTACATGGTGACTGCCAGTGCCGAGGGCTACCATTCA 2040 2100 GTGACACGGAACTGTCGGGTCACCTTTGAAGAGGGCCCCTTCCCCTGCAATTTCGTGCTC ACCAAGACTCCCAAACAGAGGCTGCGCGAGCTGCTGGCAGCTGGGGCCAAGGTGCCCCCG 2160 GACCTTCGCAGGCGCCTGGAGCGGCTAAGGGGACAGAAGGATTGA (SEQ ID NO:4) 2205

Sbjct:

## Figure 14.

>ptnr:SPTREMBL-ACC:Q9NUB5 DJ860F19.3 (NOVEL PROTEIN (ORTHOLOG OF MOUSE METALLOCARBOXYPEPTIDASE CPX-1)) - Homo sapiens (Human), 734 aa. Length = 734

Score = 2735 (962.8 bits), Expect = 0.0, Sum P(2) = 0.0 Identities = 510/510 (100%), Positives = 510/510 (100%)

Query:	1	${\tt MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS} \\ {\tt MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS} \\ {\tt CAMPBELLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS} \\ {\tt CAMPBELLALAAFAPAVGPALGAPATATATATATATATATATATATATATATATATATATA$	60
Sbjct:	1	MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS	60
Query:		${\tt EQHVRIRVIKKKKVIMKKRKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL}\\ {\tt EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL}$	
Sbjct:		EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL	
		ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH	
		ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH	
Query:		PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL	
Sbjct:		PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL	
Query:		NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH	
Sbjct:		NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH	
Query:		NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH	
Sbjct:		NYKAMRKLMKQVQEQCPNITRIYSIGKSIQGLKLIVMEMSDAPGEHELGEFEVKIVAGMA GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG	
Query:		GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG	
Sbjct:		GNEALGRELLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAIHRGSELVG WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR	
Query:		WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVFNHHLPLPTYYTLPNATVAPETR WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR	
Sbjct:		AVIKWMKRIPFVLSANLHGGELVVSYPFDM 510	100
Query:		AVIKWMKRIPFVLSANLHGGELVVSYPFDM	
Sbjct:		AVIKWMKRIPFVLSANLHGGELVVSYPFDM 510 (120.0 bits), Expect = 0.0, Sum P(2) = 0.0	
Score = Identiti	341 ies	= 67/69 (97%), Positives = 67/69 (97%)	
Query:	507	PFD-MVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPPDLRRR	565

P D MVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPPDLRRR 666 PGDYMVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPPDLRRR 725

Query: 566 LERLRGQKD 574 (SEQ ID NO:6)

LERLRGQKD (SEQ ID NO:41) Sbjct: 726 LERLRGQKD 734 (SEQ ID NO:42)

# Figure 15

>ptnr:SPTREMBL-ACC:Q9NUB5 DJ860F19.3 (NOVEL PROTEIN (ORTHOLOG OF MOUSE METALLOCARBOXYPEPTIDASE CPX-1)) - Homo sapiens (Human), 734 aa. Length = 734

Score = 1005 (353.8 bits), Expect = 4.4e-101, P = 4.4e-101 Identities = 192/193 (99%), Positives = 193/193 (100%)

Query: Sbjct:		$\label{thm:mwglllalaafapavgpalgaprnsvlglaqpgttkvpgstpalhsspaqppaetangts \\ \texttt{mwglllalaafapavgpalgaprnsvlglaqpgttkvpgstpalhsspaqppaetangts} \\ \texttt{mwglllalaafapavgpalgaprnsvlglaqpgttkvpgstpalhsspaqppaetangts} \\ \texttt{mwglllalaafapavgpalgaprnsvlglaqpgttkvpgstpalhsspaqppaetangts} \\ \\ \texttt{mwglllalaafapavgpalgapavgpaetangts} \\ \\ \texttt{mwglllalaafapavgpaetangts} \\ \\ \texttt{mwglllalaafapavgpaetangts} \\ \\ \texttt{mwgllagpapavgpaetangts} \\ $	
Query: Sbjct:		$\label{thm:contract} \begin{picture} EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL\\ EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL\\ EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL\\ \end{picture}$	
Query: Sbjct:	121 121	ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH	

Query: 181 PTRFSGVITQGRD 193 (SEQ ID NO:8)
PTRFSGVITQGR+ (SEQ ID NO:43)

Sbjct: 181 PTRFSGVITQGRN 193 (SEQ ID NO:44)

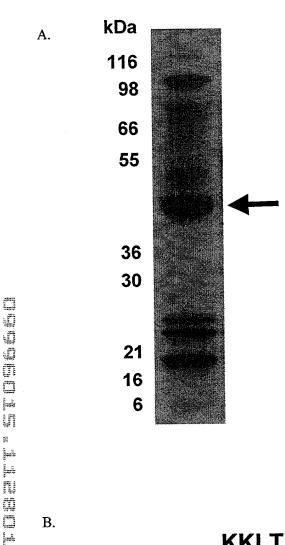
# Figure 16

>ptnr:SPTREMBL-ACC:Q9NUB5 DJ860F19.3 (NOVEL PROTEIN (ORTHOLOG OF MOUSE METALLOCARBOXYPEPTIDASE CPX-1)) - Homo sapiens (Human), 734 aa. Length = 734

Score = 3952 (1391.2 bits), Expect = 0.0, P = 0.0Identities = 734/734 (100%), Positives = 734/734 (100%)

#40110±		752,752 (2000),7 200202702	
Query:	1	${\tt MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS} \\ {\tt MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS} \\$	60
Sbjct:	1	${\tt MWGLLLALAAFAPAVGPALGAPRNSVLGLAQPGTTKVPGSTPALHSSPAQPPAETANGTS}$	60
Query:	61	$ \verb EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\ EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKKKVIMKKRKKTTTPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL \\   EQHVRIRVIKKTTPTPLTTPTPLTTPTPLTTPTPTPTPTPTPTPTPTPT$	120
Sbjct:	61	$\tilde{\textbf{eq}} \text{HVRIRVIKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL}$	120
Query:	121	ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH	180
Sbjct:	121	${\tt ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH}$	180
Query:	181	PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL	240
Sbjct:		PTRFSGVITQGRNSVWRYDWVTSYKVQFSNDSRTWWGSRNHSSGMDAVFPANSDPETPVL	
Query:	241	NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH	300
Sbjct:	241	${\tt NLLPEPQVARFIRLLPQTWLQGGAPCLRAEILACPVSDPNDLFLEAPASGSSDPLDFQHH}$	300
Query:	301	NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH	360
Sbjct:		NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH	
Query:		GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG	
Sbjct:		GNEALGRELLLLLMQFLCHEFLRGNPRVTRLLSEMRIHLLPSMNPDGYEIAYHRGSELVG	
Query:		WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR	
Sbjct:		WAEGRWNNQSIDLNHNFADLNTPLWEAQDDGKVPHIVPNHHLPLPTYYTLPNATVAPETR	
Query:		AVIKWMKRIPFVLSANLHGGELVVSYPFDMTRTPWAARELTPTPDDAVFRWLSTVYAGSN AVIKWMKRIPFVLSANLHGGELVVSYPFDMTRTPWAARELTPTPDDAVFRWLSTVYAGSN	
Sbjct:		AVIKWMKRIPFVLSANLHGGELVVSYPFDMTRTPWAARELTPTPDDAVFRWLSTVYAGSN	
Query:		LAMQDTSRRPCHSQDFSVHGNIINGADWHTVPGSMNDFSYLHTNCFEVTVELSCDKFPHE LAMQDTSRRPCHSQDFSVHGNIINGADWHTVPGSMNDFSYLHTNCFEVTVELSCDKFPHE	
Sbjct:		LAMQDTSRRPCHSQDFSVHGNIINGADWHTVPGSMNDFSYLHTNCFEVTVELSCDKFPHE	
Query:		NELPQEWENNKDALLTYLEQVRMGIAGVVRDKDTELGIADAVIAVDGINHDVTTAWGGDY NELPQEWENNKDALLTYLEQVRMGIAGVVRDKDTELGIADAVIAVDGINHDVTTAWGGDY	
Sbjct:		NELPQEWENNKDALLTYLEQVRMGIAGVVRDKDTELGIADAVIAVDGINHDVTTAWGGDY	
Query:		WRLLTPGDYMVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPP WRLLTPGDYMVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPP	
Sbjct:		WRLLTPGDYMVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPP	720
Query:	721	DLRRRLERLRGQKD 734 (SEQ ID NO:2) DLRRRLERLRGQKD (SEQ ID NO:45)	
Sbjct:	721	DLRRRLERLRGQKD 734 (SEQ ID NO:46)	

B.



**KKLTLTRPTPLVTAGPL** KKLTLTRPPPLV-AGPL

Figure 18 ClustalW alignment of CG54007-01, CG54007-04 and CG54007-05 proteins of the present invention.

CG54007-05 CG54007_01 CG54007-04	MWG LL LALA A FAPA VG PALGAPRNS VLGLA QPGT TK V PG STPA LHSS PAQ P PA ET ANGTS MWG LL LALA A FAPA VG PALGAPRNS VLGLA QPGT TK V PG STPA LHSS PAQ P PA ET ANGTS MWG LL LALA A FAPA VG PALGAPRNS VLGLA QPGT TK V PG STPA LHSS PAQ P PA ET ANGTS
CG54007-05 CG54007_01 CG54007-04	E QHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL E QHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL E QHVRIRVIKKKKVIMKKRKKLTLTRPTPLVTAGPLVTPTPAGTLDPAEKQETGCPPLGL
CG54007-05 CG54007_01 CG54007-04	ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH ESLRVSDSRLEASSSQSFGLGPHRGRLNIQSGLEDGDLYDGAWCAEEQDADPWFQVDAGH
CG54007-05 CG54007_01 CG54007-04	PTRFSGVITQGR <mark>DPG®P</mark> S <mark>L®PQ</mark>
CG54007-05 CG54007_01 CG54007-04	N L L PE P QVA R FIRL L P QTWL QGG A PCLRAE I LAC P V S D P NDL F LE A PASGS S D P L D F Q H H N L L P E P QVA R F I R L L P QTWL QGG A PCLRAE I LAC P V S D P NDL F L E A PASGS S D P L D F Q H H
CG54007-05 CG54007_01 CG54007-04	NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH NYKAMRKLMKQVQEQCPNITRIYSIGKSYQGLKLYVMEMSDKPGEHELGEPEVRYVAGMH
CG54007-05 CG54007_01 CG54007-04	G N E AL G R E L L L'LMQF LCH E FL R GN PR V T R L L S EMR I H L L P S MN P D GY E I A Y H R G S E L V G G N E A L G R E L L L'LLMQF L CH E FL R GN P R V T R L L S EMR I H L L P S MN P D GY E I A Y H R G S E L V G
CG54007-05 CG54007_01 CG54007-04	WAEGRWNNOSIDLNHN FAD LNT PLWEAODDGKVPH I VPNHHLPLPTYYTL PNATVAPETR WAEGRWNNOSIDLNHN FAD LNT PLWEAODDGKVPH I VPNHHLPLPTYYTL PNATVAPETR
CG54007-05 CG54007_01 CG54007-04	AVIKWMKRI PFVLSAN LHGGELVVSYPFDMTRTPWAARELTPTPDDAVFRWLSTVYAGSN AVIKWMKRI PFVLSAN LHGGELVVSYPFDMV
CG54007-05 CG54007_01 CG54007-04	LAMQDTSRRPCHSQDFSVHGNIINGADWHTVPGSMNDFSYLHTNCFEVTVELSCDKFPHE
CG54007-05 CG54007_01 CG54007-04	NELPQEWENNKDALLTYLEQVRMGIAGVVRDKDTELGIADAVIAVDGINHDVTTAWGGDY
CG54007-05 CG54007_01 CG54007-04	WRLLTPGDYMVTASAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPFAEGYHSVTRNCRVTFEEGPFPCNFVLTKTPKQRLRELLAAGAKVPP
CG54007-05 CG54007_01 CG54007-04	DLRRRLERLRGQKD DLRRRLERLRGQKD

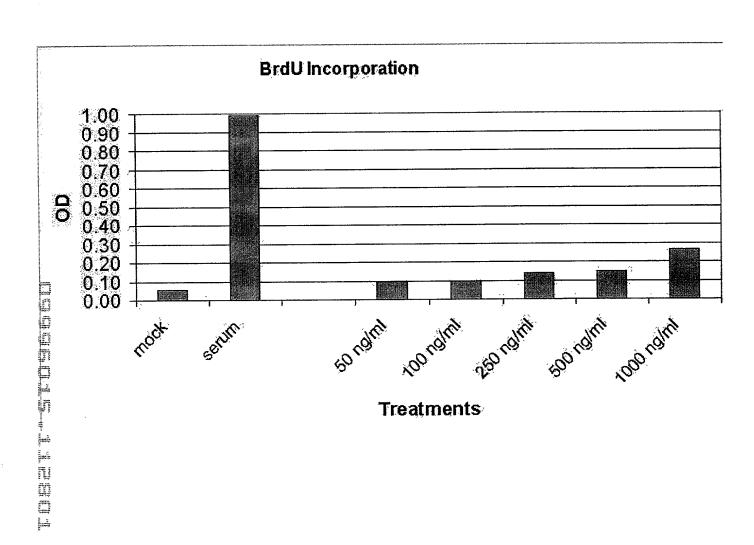


Fig. 20

